

XPS-100

easylife
User Guide

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XPS-100

easylife User Guide

SUBJECT

Information to Enable the User to Work With the *easylife* Interface to UNIX

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SECTION I

INTRODUCTION

Overview

In the years since 1969, the UNIX operating system has acquired many admirers in the computing world. It is especially suitable for experienced programmers to develop software quickly and efficiently. However, casual users are frequently confused by the bewildering array of command names and related system directories.

To address the needs of the less experienced user, Honeywell Bull have developed *easy*life. This procedure allows menu-driven access of the UNIX functions and packages.

The System Administrator may use *easy*life to define a customized environment for a new user, in which logically connected commands are grouped together in menus. Those users not requiring a particular range of functionality, for example mail facilities or the calculator, will not have these options in their directories.

When the new user logs in, one of two alternatives can occur:

- If configured to be a normal UNIX user, the appropriate shell will be invoked, and the new user may commence a normal UNIX session.
- If configured to be an *easy*life user, the *Main Menu* of the customized environment will be displayed. The user may locate the required function by an hierarchical descent to the relevant menu.

The *easy*life user may be configured with the ability to write shell script applications and build them into a personalised menu.

Experienced programmers may also find *easy*life useful, when they require to access some UNIX functionality with which they are not familiar.

Design Considerations

The basic design concept incorporated in *easy*life was that of:

FUNCTIONALITY -> ACTION -> OBJECT.

The main menu contains an entry for each of the main areas of functionality in UNIX. These are:

- Services
- File Management
- Applications
- Software Factory
- System Administrator.

By selecting a FUNCTIONALITY, the user may access a menu of the associated ACTIONS. An ACTION indirectly invokes a UNIX command.

Most UNIX commands work on OBJECTS such as source files, terminal files or printer files. When an ACTION is invoked, a list of viable OBJECTS is displayed in an *OBJECT* window.

To illustrate these points, the screens displayed in a short *easy*life session are shown below.

When user *yourname* enters the command *easylife* the main menu is displayed:

Easylife R -(c)1986 Honeywell Bull 5
/usr/yourname

TAB for info

```
Main Menu
<SERVICES>
File Management
Applications
Software Factory
System Administration
Exit
```

When the user selects the *File Management* option the following menu is displayed:

Easylife R -(c)1986 Honeywell Bull 5
/usr/yourname

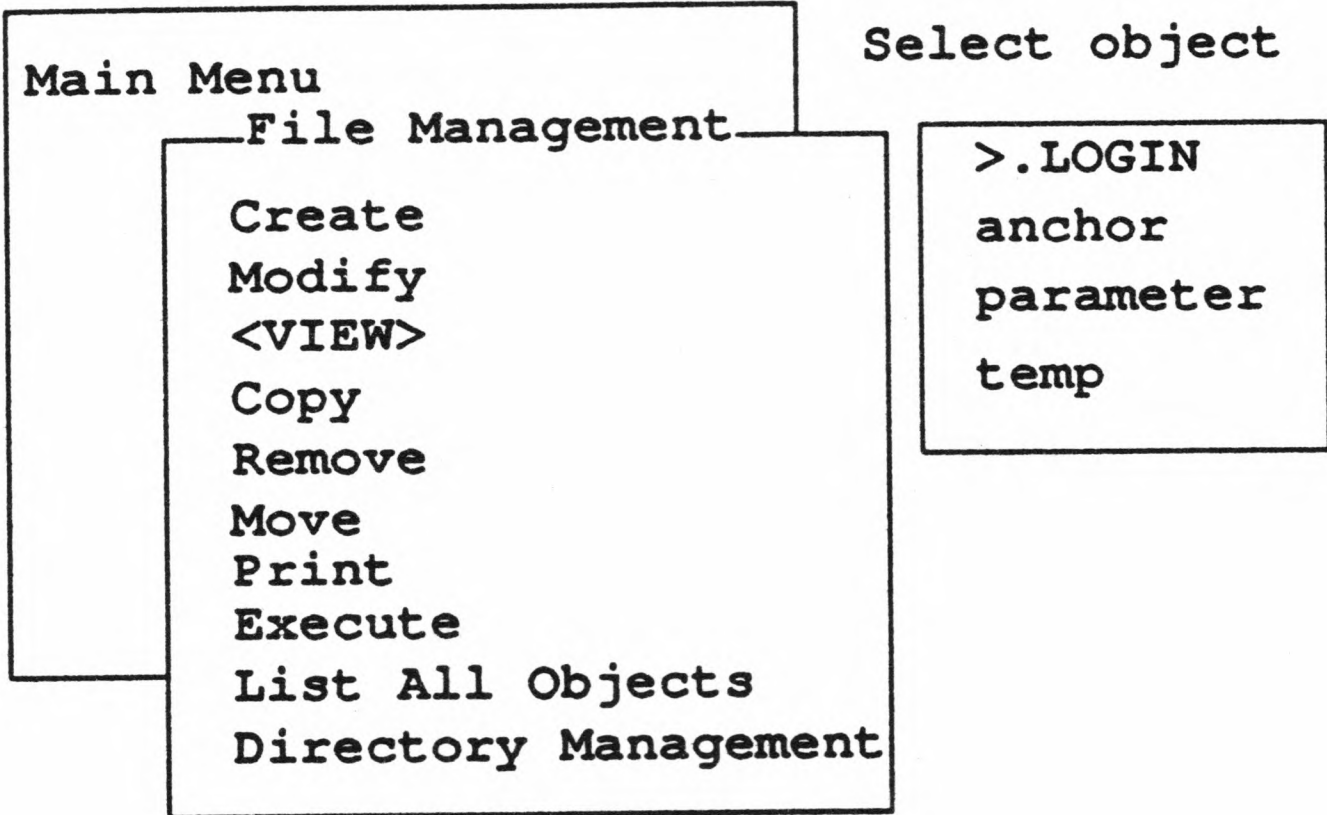
TAB for info

```
Main Menu
  File Management
    <CREATE>
    Modify
    View
    Copy
    Remove
    Move
    Print
    Execute
    List All Objects
    Directory Management
```


When the user selects the *VIEW* option, all the OBJECTS, in this case the files in the current directory, are displayed in an *OBJECT* window that is overlaid on the screen:

Easylife R -(c)1986 Honeywell Bull 5
/usr/yourname

TAB for info



At any time, in any menu, the user may press the `<TAB>` key. This will cause a list of the currently available special keys to be displayed in a window on the left of the screen:

Easylife R - (c) 1986 Honeywell Bull 5

/usr/yourname

TAB for info

Main Menu

File Management

Select object

>.LOGIN anchor

TAB : legend

RET : object selection

SPACE : multiple selection

'j' : down one line

'k' : up one line

'J' : down one page

'K' : up one page

'#' : path name entry

'!' : shell escape

<BREAK> : exit from the easylife

<f1> or 'p' : previous menu

<f2> or 'CTRL_l' : clear screen

<f3> or 'CTRL_d' : restart the session

In different menus, this window may contain different special keys.

National Languages In easylife

The UNIX operating system and its commands are very definitely aimed at an English-speaking audience. Commands such as *grep* - "get regular expression" - are obscure, even for people who know English well.

The *easy*life procedure protects users from this problem, by using an interface of menus, written in everyday language, to access the UNIX commands indirectly. English, Italian and French versions of the menus are supplied at installation time.

In fact, *easy*life is so versatile that it can work when different languages are being used simultaneously on different terminals.

SECTION II

STRUCTURE OF *easy*life

Run-time *easy*life and Full System *easy*life

Machines that have both GCOS4 and UNIX installed are supplied with a system disk that contains all the menus of an enhanced version of *easy*life. The enhancements are extra menus to manage the GCOS4-UNIX interface, and may be found in Section VII, "easylife AND GCOS4".

The system disk on a UNIX-only machine is supplied solely with sufficient menus to manage the run-time file system. See the "EASYCONF USER'S GUIDE" for a discussion of the functions contained in each extension to the file system. Section VI of the current manual contains a list of the subset of menus available to the run-time *easy*life user. To manage the functions supplied in any of the other four extensions of the full system, the user must load all of the remaining *easy*life menus. See the section entitled "INSTALLATION OF DELTA *easy*life" in the "SYSTEM OPERATIONS GUIDE".

There is a slightly reduced subset of menus that may be found on both a UNIX-only machine and a UNIX-GCOS4 machine. This is composed of almost all the full system *easy*life menus of the UNIX-only machine, without the GCOS4-UNIX interface menus of the GCOS4-UNIX machine. The remainder of the manual should be read primarily from the point of view of a user working with this subset of menus.

Files Installed

The following is a list of the main files used by *easylife*:

- ***/usr/bin/easylife*** : run-time procedure
- ***/usr/bin/lm*** : run-time utility
- ***/usr/lib/easy2*** : directory containing:
 - ***.login*** file
 - ***.profile***
 - ***Tcap*** (colour terminal info)
 - english, italian, french (reference language menu directories)
 - ****.conv*** (message files)
 - ***langfile*** (existing reference languages)
 - ***paths*** (internal path names)
 - ***type*** (for GCOS/UNIX)
 - ***unix.login*** (for C shell User)
 - ***disk_type*** (list of supported disks)
- ***/usr/EASY2/root/*.menu*** : directory containing preconfigured super-user's menus
- ***/usr/EASY2/lp/*.menu*** : directory containing preconfigured Printer Administrator's menus
- ***/usr/bin/easyln*** : these are add-on packages
- ***/usr/bin/easybsc*** : invoked via the *Packages* option,
- ***/usr/bin/easysna*** : when a LAN, BSC or SNA network is available

Terminal Requirements

The *easy*life procedure can run on a variety of terminals. It provides four different choices of window, ranging from graphics windows, to windows built from characters, such as - and |. The second type works in three different modes depending on the terminal: fully highlighted windows with inverse video, partially highlighted windows, and simple windows. These types may all be chosen using the *Window Appearance* option in the *easy*life *Parameters* menu. This variety is provided to enable users to run *easy*life, even if their terminals do not support sophisticated screen attributes. Simple windows, which are the default, should not cause problems in any environment.

The *easy*life procedure updates the *usr/lib/terminfo* directory containing the system terminal capability files. For *easy*life to work fully on a particular terminal, the description of that terminal, in */usr/lib/terminfo*, must have enough information for the screen editor, *vi*, to run, and must also include information about arrow keys and function keys.

It must be emphasised that *easy*life will not work properly with terminals that have incomplete */usr/lib/terminfo* descriptions. Nevertheless, most functions can be accessed by two different keys, for example, *<f1>* has the same effect as *p*. Therefore, it should be possible to operate the program in raw environments.

Additional Notes for Colour Terminals

If a user has a colour terminal, there may be additional operations to perform. If the colour terminal is not of type *hw50*, and the user does not wish to have a coloured display, no further action is necessary. If the user has an *hw50*, but is content with the defaults, no further action is necessary.

The file */usr/lib/easy2/Tcap* is supplied with a single entry that describes the default colours for the *easy*life masks on an *hw50*. This entry is of the form:

#hw50	:	terminal type
HEADER=^[[002v	:	colour of the header title
UNDERLINED=^[[004v	:	colour of the underlining
BOXES=^[[001v	:	colour of the box borders
))	:	entry terminator

In the documentation supplied with the colour terminal, the user should find the section that deals with the escape sequences for setting colours. If the user has an *hw50*, and wishes to change the default colours, it is only necessary to edit the *HEADER*, *UNDERLINED*, and *BOXES* parameters. To add a different colour terminal, copy an existing entry, change the terminal name, and then use the manufacturer's documentation to edit the control sequences to the colours desired.

SECTION III

USING *easy*life

Using The *easy*life Menus

The *easy*life procedure is designed to be used by means of a series of hierarchical menus. The UNIX functions and other System Administration procedures are grouped in logically connected sets. When an *easy*life user logs in, the *Main Menu* is displayed. From this menu, the user may descend, through the different levels of the menu hierarchy, to the sub-menu in which the required function resides.

The name of the sub-menu is always the first line of its own sub-menu; this line is a title and not a selectable option. When a new sub-menu is displayed, it is overlaid on the previous menu, but offset by one character horizontally to the right, and one character vertically downward. This enables the user to see the name of the previous menu, thus showing how the function fits into the overall structure.

Before selecting an option, the user can move down through the menu by pressing the key *j*, or the *down-arrow* key. The user can move up by pressing the key *k*, or the *up-arrow* key.

The option currently ready for selection is highlighted. On some terminals this may mean using inverse video; on others, changing the background colour; on others parenthesising the option and changing its characters to upper case. To finalize the selection, the user should press the *<RET>* key. The corresponding menu will be displayed.

The execution of one type of menu entry may request a new value that did not previously exist, for instance, the name of a new file to be created. Selection of this type of menu entry will cause a message to be displayed, on the bottom left of the screen, which requests the user to input a suitable value. The user should enter the value and then press **<RET>** to continue.

A second type of menu entry may require a value from a fixed list, for instance, a file name from an existing directory. In this case, a box containing all the permissible values will be displayed on the right of the screen. Use the key *j*, or the *down-arrow* key, to move down, and the key *k*, or the *up-arrow* key, to move up the list. To select a parameter in the box, press **<SPACE>**. A dollar sign, \$, is displayed to show that the parameter has been selected. Re-pressing **<SPACE>** de-selects the parameter, and the dollar sign disappears.

When sufficient parameters have been selected, and a coherent command line has been constructed, the user should press **<RET>** to request the execution of the command. A message, seeking confirmation of the request, will be displayed. To run the command, enter *y* and then press **<RET>**.

Calling easylearn From easylife

The *easylife* users, who also have *easylearn* installed, may call *easylearn* directly from *easylife*, in two different ways.

It is possible to go to the *Main Menu* of *easylearn*, from every point in the *easylife* structure, by pressing the question mark key, *?*. The user may then descend to any point desired in the *easylearn* menus. To return to *easylife*, select the *Exit* option in the main menu of *easylearn*, or press **<BREAK>**. See the "easylearn USER GUIDE".

At some lower levels of the *easylife* hierarchy, the user may go directly to the corresponding entry in the *easylearn* menus, by pressing **<f4>** or *a*. By doing so, the user may obtain more information on the command and its parameters. The related UNIX manual entry may also be available for displaying on the screen, or listing on a printer. Press **<f1>** or *p* to return to *easylife*.

Currently Available easylife Commands

The set of currently available *easylife* commands changes depending on where in the session the user is. For instance, if the user were still in the *Main Menu*, it would not be possible to use the key *J*, which is reserved for going down a page in an object list. The user may discover which *easylife* commands are currently available, by pressing the **<TAB>** key to list them.

The following is a complete list of all the *easylife* commands.

TAB	:	legend
RET	:	object selection
SPACE	:	multiple selection
'j'	:	down one line
'k'	:	up one line
'J'	:	down one page
'K'	:	up the page
#	:	path name entry
!	:	shell escape
?	:	main menu <i>easylearn</i>
/	:	change directory
.	:	shortcut to the <i>Service</i> menu
'-'	:	previous month
'+'	:	next month
<BREAK>	:	exit from the <i>easylife</i> session
<f1> or 'p'	:	return to the previous menu
<f2> or 'ctrl-l'	:	refresh the screen
<f3> or 'ctrl-d'	:	restart the session
<f4> or 'a'	:	corresponding menu <i>easylearn</i>
<f5> + any key	:	set anchor
<f6> + any key	:	call anchor

Anchors

After using *easy*life for some time, the user may discover that some menu options are used very frequently. It is possible to access these entries directly by setting *anchors*. To set an *anchor*, the user moves to a menu option in the normal way, and then presses <f5> followed by another key, the *anchor*. If, when in another menu, the user wishes to return to the anchored entry, it is now only necessary to press <f6> followed by the same *anchor* key.

There may be as many *anchors* as there are free keys available. *Anchors* may be listed, removed, or saved for use in successive sessions. See the *Services/Anchor Management* menu.

Error Handling

The UNIX commands launched by programs often return error messages on a file called *standard error*, or *stderr*. This file, which is normally displayed straight away on the screen, has been redirected by *easy*life to a file that is updated whenever an error occurs. If the file becomes full, the user is given the option of saving it to another file. Each time the file is updated, a message is sent to the screen.

The *error* file may be viewed when, during the course of an *easy*life session, *ERR* appears in the top right-hand corner of the screen; use the *Services/Error Handling/View* option. The *error* file may be found in the directory */usr/tmp*, and is removed by *easy*life at the end of session. The name of the file is *ern(xxx)*, where *xxx* is the process identity of *easy*life. Every time a message is written to *stderr*, there is a corresponding message written to this file, consisting of the date, time and command that generated the error.

If the user launches a process in background, a file named *eouerr* is created in the current directory. This holds any error messages that occur in the background process.

SECTION IV

MAKING A USER

This section accesses functions only available to a user who has loaded all of the *easy*life menus, and is aimed mainly at the System Administrator. Section III should be read first, to learn how to move from one menu to another. The first part of this section describes how an *easy*life user may be created and configured. A specimen configuration session is included below, followed by a description of how an *easy*life user may write shell script applications, and include these in a menu. The last part of the section describes how to make a 'hybrid' user. It is assumed that the System Administrator is either root, or at least has superuser privileges.

Configuring An *easy*life User

1. The System Administrator should login, and in response to the prompt enter:

*easy*life

and press **<RET>**.

2. The screen will clear and then display the *Main Menu* of the *easy*life procedure. Using the method described in Section III, select the *System Administration* option.
3. From this menu select the *User Configuration* option.

There are now many options open to the System Administrator, as there are a wide range of possible user environments that may be created. Since it is impracticable to deal with all of these, there follows a single specimen session describing a specific customization of a user's environment. This session should provide the System Administrator with sufficient indication as to how any other customization should proceed.

The aim below is to create a new *easy*life user, called *qwer*. This user will be configured to have the functions necessary to write and compile C language programs, to use the UNIPLEX word processor, and to create a menu to hold applications written as shell scripts.

4. In this menu, select the *Create New Easy*life User option.

5. On the bottom line is displayed:

User name :

Enter *qwer* and press **<RET>**. The name must conform to UNIX conventions.

6. On the bottom line is displayed:

Partition (default /usr) :

Press **<RET>** to select the */usr* partition.

7. On the bottom line is displayed:

Comment (optional) :

This may be used to hold extra information, like the user's address and telephone number, or simple mnemonic phrases. The field must conform to UNIX conventions. Enter:

qwer is an easylife user

and press **<RET>**.

8. On the bottom line is displayed:

Protect customization ? (y/n)

Enter *n* and press **<RET>**. If *y*, the user's files will be write-protected by root, and therefore unmodifiable by the user.

9. On the bottom line is displayed:

Shell type (sh or csh) :

Enter *sh* and press **<RET>**.

10. On the bottom line is displayed a message similar to:

```
qwer::26:37:qwer is an easylife
user:/usr/qwer:/bin/sh
Confirm ? (y/n)
```

The user and group identities, **:26:37:**, will almost certainly be different on a different system. Enter *y* and press **<RET>**.

11. In the bottom left corner, the word **Wait** will be displayed while the new user is being put on the system. After a few seconds, the *Customize Menu* menu is automatically displayed. Select *Interactive Configuration*. This allows the System Administrator to choose only those menus necessary for the new user.
12. The *Available Languages* menu is displayed. Select *English*.

13. The following menu is displayed:

Interactive customization. <RET> to confirm menu.

Menu: Main Menu

- () 0) Services
- () 1) File Management
- () 2) Applications
- () 3) Software Factory
- () 4) System Administration
- () 5) Exit

Number of selected entry ("a/A" for all) :

To select the *Software Factory* option, enter the corresponding number, 3, and press <RET>.

14. The following menu is displayed:

Interactive customization. <RET> to confirm menu.

Menu: Software Factory

- () 0) C
- () 1) C SVS
- () 2) RM/COBOL-85
- () 3) MICRO-FOCUS COBOL
- () 4) SVS BASIC Interpreter
- () 5) SVS FORTRAN
- () 6) SVS PASCAL

Number of selected entry ("a/A" for all) :

Press 0 for C, and press <RET>.

15. The following menu is displayed:

Interactive customization. <RET> to confirm menu.

Menu: C Language

- () 0) Source Program Handling
- () 1) Compile and Link
- () 2) Tools
- () 3) Run Programs

Number of selected entry ("a/A" for all) :

Enter *a*, followed by <RET>. In this way, the user has the full range of functions pertaining to the C Language.

16. Since all the options have been included, no more can be done at this level. There is an automatic return to the previous menu, and the *Software Factory* menu is redisplayed:

Interactive customization. <RET> to confirm menu.

Menu: Software Factory

- (*) 0) C
- () 1) C SVS
- () 2) RM/COBOL-85
- () 3) MICRO-FOCUS COBOL
- () 4) SVS BASIC Interpreter
- () 5) SVS FORTRAN
- () 6) SVS PASCAL

Number of selected entry ("a/A" for all) :

The asterisk, *, in the brackets on the C Language option line, indicates that the System Administrator has worked on that option. No more options from this menu are required, so press <RET> to confirm that no further modifications will be made.

17. The *Main Menu* is redisplayed:

Interactive customization. <RET> to confirm menu.

Menu: Main Menu

- () 0) Services
- () 1) File Management
- () 2) Applications
- (*) 3) Software Factory
- () 4) System Administration
- () 5) Exit

Number of selected entry ("a/A" for all) :

The asterisk in the *Software Factory* option line, shows that the System Administrator has worked on this menu.

In order to include the UNIPLEX word processor, and the User function for running personal applications, select the *Applications* option, by pressing 2, followed by <RET>.

18. The following menu is displayed:

Interactive customization. <RET> to confirm menu.

Menu: Applications

- () 0) Document Handling
- () 1) User
- () 2) Communication
- () 3) UNIPLEX
- () 4) UNIFY
- () 5) INFORMIX SQL
- () 6) INFORMIX 4GL

Number of selected entry ("a/A" for all) :

Press 3 to select *UNIPLEX*, and press <RET>.

19. The menu is redisplayed:

Interactive customization. <RET> to confirm menu.

Menu: Applications

() 0)	Document Handling
() 1)	User
() 2)	Communication
(*) 3)	UNIPLEX
() 4)	UNIFY
() 5)	INFORMIX SQL
() 6)	INFORMIX 4GL

Number of selected entry ("a/A" for all) :

The asterisk indicates that *UNIPLEX* has been selected. To select the *User* option, press *1* followed by <RET>.

20. The menu is redisplayed:

Interactive customization. <RET> to confirm menu.

Menu: Applications

() 0)	Document Handling
(*) 1)	User
() 2)	Communication
(*) 3)	UNIPLEX
() 4)	UNIFY
() 5)	INFORMIX SQL
() 6)	INFORMIX 4GL

Number of selected entry ("a/A" for all) :

The asterisk indicates that *User* has also been selected. As this menu is no longer required, press <RET> to confirm that there will be no more modifications made.

21. The previous menu, which in this case was the *Main Menu*, is automatically redisplayed.

Interactive customization. <RET> to confirm menu.

Menu: Main Menu

- () 0) Services
- () 1) File Management
- (*) 2) Applications
- (*) 3) Software Factory
- () 4) System Administration
- () 5) Exit

Number of selected entry ("a/A" for all) :

In order to enable the user to configure a personal application menu, it is necessary to include the *User Menu Management* functions, which are contained in the *Services* menu. Press 0 and then <RET> to select the *Services* option.

22. The *Services Menu* is displayed:

Interactive customization. <RET> to confirm menu.

Menu: Services Menu

- () 0) Clock
- () 1) Calendar
- () 2) Mail
- () 3) Calculator
- () 4) Error Handling
- () 5) "EasyLife" Parameters
- () 6) User Menu
- () 7) Anchor Management
- () 8) Messages
- () 9) Context information

Number of selected entry ("a/A" for all) :

It is only necessary to press **6**, to select the *User Menu* menu. However, it is normally advisable to include the other services, so enter *a* and then press **<RET>**.

23. Since no more can be done in the *Services Menu*, the *Main Menu* is automatically redisplayed:

Interactive customization. <RET> to confirm menu.

Menu: Main Menu

```
(*) 0)      Services
( ) 1)      File Management
(*) 2)      Applications
(*) 3)      Software Factory
( ) 4)      System Administration
( ) 5)      Exit
```

Number of selected entry ("a/A" for all) :

The *Main Menu* has asterisks in the *Services*, *Applications* and *Software Factory* option lines; these refer to the menus selected for *qwer* by the System Administrator.

No more is required for user *qwer*'s configuration. Press **<RET>** to confirm this selection.

24. The System Administrator is returned to the *Available Languages* menu. Press *p* four times to ascend through the hierarchy to the *Main Menu*.
25. Select the *Exit* option to leave *easy life*.

The new user may use the system straight away. To confirm that the new user is working as expected, the System Administrator should logout and login again as *qwer*. The *Main Menu* of the user *qwer* is displayed. This menu contains only three entries, *Services*, *Applications* and *Software Factory*, as only these functionalities were given to *qwer*.

Press *p*. The following message is displayed on the bottom line of the screen:

Really quitting ? (y/n)

Reply *y* and press **<RET>**. This automatically logs out the *easy**life* user, thus ending the current session.

NOTES:

- The System Administrator should take care when assigning functions to an unskilled user. Some functions, if used ineptly, could crash the system.
- During the configuration of a user, it is often necessary to descend through a hierarchy of menus. Suppose the System Administrator selects certain functions, but not all, in a sub-menu. If the System Administrator returns to a higher level menu, and in response to *Number of selected entry*: replies *a* or *A*, then all of the associated sub-menus will be given to the user. That is, even the functions deliberately not selected at the lower level will be given to the user, if all is specified at a higher level.
- The options in a configuration menu may be either selected, indicated by an asterisk, or not selected, without an asterisk. If an option was selected, and its number is entered again, the option will be rejected. Further modification of this option is permissible.
- Each new *easy**life* user will login with the shell assigned at creation time. The shell escape command, *!*, invokes the same shell. The user may change the shell, if the *Shell Escape* option has been included in the menu configuration. The user must consider carefully possible problems due to the differences in syntax between the shells, especially as regards metacharacters.
- The *easy**life* user may make modifications that should be preserved for subsequent sessions; for instance, window definitions. Use the *Save Parameters* option of the "*Easy**life*" *Parameters* menu.

- If a prototype for a related group of users already exists, the System Administrator can generate similar new users by selecting *Copy Existing User Configuration* in the *Customize Menu* menu. In this case, only the new user names need be supplied.

Creating An Application Menu

To build a personal menu, the *easylife* user must have been configured with the following items in the *Main Menu*:

- **Services** : the user must have all the *User Menu* options to build the menus of applications.
- **Applications**: the user must have the *User* option to launch the personal applications written.

To write personal applications, the user must be familiar with shell scripts and the screen editor *vi*.

The following specimen session describes how the user *qwer*, created above, can write two simple applications and include them in a menu. The first, *GREETING*, simply sends a message to the screen; the second, *prf*, prints a file on */dev/lp*.

1. Login as *qwer*.
2. The *Main Menu* will appear. Select the *Services* option.
3. From the *Services Menu*, select the *User Menu* option.
4. When the *User Menu Management* is displayed, select the *Create/Modify Menu* option.
5. The following message is then displayed:

Shell in use : /bin/sh

This is to remind the user which shell will interpret the application shell scripts, after the *Activate Menu* option has been selected. Press **<RET>**.

6. The screen is cleared and an entry is made into the screen editor *vi*. The user should press *i*, and then enter the following lines:

```
QWER'S PERSONAL MENU
GREETING      (   echo 'Hello from easylife!'
                )
prf           (   echo 'What is the file name?'   #filename
                query
                read a
                pr $a > /dev/lp                  #print file
                )
```

To quit *vi*, press **<ESC>** and then enter **:wq**. The name of the menu created is **QWER'S PERSONAL MENU**. The labels, **GREETING** and **prf**, are the menu entry names.

7. After the quit, there is an automatic return to *User Menu Management* menu. To compile the new menu, select the *Activate Menu* option.
8. The word **Wait** is displayed in the bottom left corner. When it is replaced by the message:

Command performed

the applications should have been compiled. To test this, press *p* twice to return to the *Main Menu*. Select the *Applications* option.

9. When the *Applications* menu is displayed, select the *User* option.
10. The following menu, of the user's personal applications, is displayed:

```
QWER'S PERSONAL MENU
GREETING
prf
```

Select the **GREETING** option.

11. The screen blanks. In the top left corner is displayed:

Hello from easylife!

On the bottom line is displayed:

Hit <RET> to continue.

To return to the menu, press <RET>.

12. User *QWER'S PERSONAL MENU* is displayed. Select the *prf* option.

13. The screen clears. In the top left corner, the following enquiry is displayed:

What is the filename?

Enter *./login* and press <RET>. The *./login* file of root is printed on */dev/lp*. Press <RET> to return to *QWER'S PERSONAL MENU*.

14. Press *p* twice to return to the *Main Menu*.

15. Press *p*. The following message is displayed on the bottom line of the screen:

Really quitting ? (y/n)

Reply *y* and press <RET>. This automatically logs out the *easylife* user, thus ending the current session.

NOTES:

- If the Bourne shell, */bin/sh*, is used to write the shell scripts, make sure that the C shell is not used to run the application.
- The length of the menu name must not exceed 36 characters.
- Each *easylife* user may have one personal menu with up to 25 entries.

Making A Hybrid User

Suppose there already exists a normal UNIX user, *zxcv*, with a login directory, */usr/zxcv*. The System Administrator may give this user the facility of accessing an *easy*life configuration. This means that *zxcv* will become a 'hybrid' user, able to function as a normal UNIX user or as an *easy*life user.

To modify *zxcv*, the System Administrator should perform the following procedure.

1. After logging in, the System Administrator should check that the user has a *.login* file. If not, the System Administrator should create one.
2. The menus must be configured for user *zxcv*. Enter the command:

easylife

and press **<RET>**.

3. When the *Main Menu* is displayed, select the *System Administration* option.
4. When the *System Administration* is displayed, select the *User Configuration* option.
5. The *User Configuration* menu is displayed. Select the *Customize Menu* option.
6. On the bottom line is displayed:

User name :

Enter *zxcv* and press **<RET>**.

7. On the bottom line is displayed:

Protect customization ? (y/n)

Enter *n* and press **<RET>**. If *y*, the user's files will be write-protected by root, and therefore unmodifiable by the user.

8. The *Customize Menu* menu is now displayed.

Proceed, as from step 11 in the "Configuring An easylife User" description. Select only those functionalities required for this hybrid user's menus. The user *zxcv* will login as a normal UNIX user, but can execute the command *easylife*, to enter the *easylife* menus.

Making An Anchor

It is possible to associate an anchor with any menu entry. Because the entry is located directly, without involving repeated menu selection, access time is reduced. The following session describes how to set an anchor on the entry for *Italian* in the *Available Languages* menu. This entry was chosen because it is fairly deeply nested, and thus demonstrates well the improved ease of access. Normally, the user would choose an entry that was frequently used, for example, a *text editor* function.

1. Login as *qwer*.
2. The *Main Menu* will appear. Select the *Services* option.
3. From the *Services* menu, select the "*Easylife*" *Parameters* option.
4. When the "*Easylife*" *Parameters* menu is displayed, select the *User Language* option.
5. When the *Available Languages* menu is displayed, move to the *Italian* option.
6. Press <f5> followed by *i* to set the letter *i* as the anchor for this option.
7. The following message is displayed in the bottom left corner:

Command performed

Press <RET> to return to the *Available Languages* menu.

8. Press <f3> to return to the *Main Menu*.
9. To test this anchor, press <f6> followed *i*.
10. The *Italian* option of the *Available Languages* is highlighted.
11. Press <f3> to return to the *Main Menu*.

An anchor is more useful if it lasts from session to session. It will last, if it is first saved.

12. Select the *Services* option.
13. Select the *Anchor Management* option.
14. To check that *i* is one of the current anchors, select the *List* option.
15. The screen is cleared and a current list of the anchors, set in *easy life*, is displayed. This will include a line referring to the anchor in the *Available Languages* menu, like the following:

i : Italian

Press <RET>.

16. Select the *Save Anchors* option.
17. Press <f3> to return to the *Main Menu*.
18. Press *p*. The following message is displayed on the bottom line of the screen:

Really quitting ? (y/n)

Reply *y* and press <RET>. This automatically logs out the *easy life* user, thus ending the current session.

NOTES:

- **An anchor, that has been saved, will remain in force in subsequent sessions until it is removed.**
- **The user is prevented from accidentally using the same letter twice for different anchors. If this is attempted, the following message will be displayed:**

Anchor not available

The user should choose instead a previously unused key as the new anchor.

SECTION V

MANAGING THE PRINTERS WITH *easy*life

There is a special hybrid user, *lp*, otherwise known as the Printer Administrator, having a login directory */usr/spool/lp*, installed with the package. This user is responsible for managing the printers associated with the system. Only *lp* can perform all the management functions described below. Specifically, even root cannot correctly execute all these functions. It is assumed that *lp* is familiar with relevant printer configuration details under UNIX such as device names, classes and protocols.

If the system is heavily loaded, the user may notice the messages **Wait** and **Command Performed** being displayed in the bottom left corner. These are advisory messages and require no special action.

Method

1. The Printer Administrator, *lp*, should login. When the prompt is displayed, enter:

```
# easylife
```

and press **<RET>**.

2. The *Main Menu* of *lp* is displayed. Select the *System Administration* option.

3. The *System Administration* menu is displayed. Select the *Printer Configuration* option.

At this point, there are many possibilities open to the Printer Administrator. There follows a specimen session which shows how to add a printer to the system and how to assign it to a class. Press **<RET>**.

4. The *LP Spooling Management* menu is displayed. Select the *Printer Management* option.
5. The *Printer Management* menu is displayed. Select the *Create* option.
6. In the bottom left of the screen is displayed:

Symbolic name :

Enter *printer1*. Press **<RET>**.

7. This line is overwritten with:

Device name :

Enter */dev/lp*. Press **<RET>**.

8. This line is overwritten with:

Protocol model (default dumb) :

To select the default, press **<RET>**.

9. This line is overwritten with:

Class (optional) :

Enter *class1*. Press **<RET>**.

10. This line is overwritten with:

Is it a 'login terminal' ? (y/n)

Enter *n*. Press **<RET>**.

11. A summary of the configuration details is displayed:

**/usr/lib/lpadmin -pprinter1 -v/dev/lp -mdumb
-cclass1
Confirm ? (y/n)**

Enter *y*, to confirm that this definition is correct. Press **<RET>**.

12. To test that *printer1* has been added to the system, select *List* from the *Printer Management* menu.
13. In the top right corner, a window is displayed containing the line, *printer1*. This confirms that *printer1* is now on the system. Press **<RET>**. The list disappears.
14. When *printer1* is added to the system, it must be configured to accept reports on its queue, and enabled to print those which it has accepted. Select the *Accept* option.
15. In the top right corner, a window is displayed containing the line *printer1*. Move down, if necessary, to *printer1* and press **<RET>** to select it.
16. After a few seconds, the list window disappears. The 'accepted' *printer1* is still disabled, that is, unable to print reports. Select the *Enable* option.
17. In the top right corner, a window is displayed containing the line, *printer1*. Move down, if necessary, to *printer1* and press **<RET>** to select it.
18. After a few seconds, the list window disappears. The new printer, *printer1*, is ready to print reports. Press *p* to go to the previous menu, *LP Spooling Management*.

19. By now, *printer1* has been configured and is ready to print reports. To test this, a report will be sent to *printer1*. Press **!** to escape to a shell.

20. When the prompt, **\$**, is displayed, enter:

```
$ lp /usr/lib/easy2/english/clconf.m  
-dprinter1
```

Press **<RET>**. A message similar to the following is displayed:

```
request id is printer1-48 (1 file)
```

21. The English language version of the *Printer Class Management* menus will be printed on *printer1*, that is, */dev/lp*. Press **ctrl-d** to exit from the shell.

The *LP Spooling Management* menu is displayed. The next part of the session is designed to show how *lp* may create a printer class, and assign a previously defined printer to be a member of the new class.

22. Select the *Printer Class Management* option.

23. Select the *Create a Class* option.

24. In the bottom left of the screen is displayed:

```
Class :
```

Enter *class2*. Press **<RET>**.

25. The *Select object* window is displayed on the top right of the screen. Select *printer1*. Press **<RET>**.

26. To confirm that the class has been created, select *List Classes*.

27. In the top right corner is displayed a list of classes. One of the lines should be *class2*. This means that *printer1* now belongs to both *class1* and *class2*. Press **<RET>**.

28. Press *p* three times to ascend to the *Main Menu* and exit in the normal way.

The other available menu options may be used in a similar manner.

NOTE: If there any printers on the system that are configured as login terminals, they will be disabled when the scheduler is activated. After a printer administration session, when the scheduler is reactivated, these terminals will not be re-enabled automatically; the Printer Administrator must do this. It is important to realise that a login terminal is disabled without a message being issued to the user concerned. This may cause confusion.

SECTION VI

A COMPLETE LISTING OF ALL THE MENUS

Most of the menus are self-explanatory. This section lists all the menus, with the sub-menus adjacent to the higher level menus in order to show the overall hierarchical structure.

The titles of each sub-menu are printed in bold type. These are only titles, and not options that may be selected in that sub-menu.

System Administrator Menus for the Run-Time System

The system disk is supplied with the following menus. With these menus, the System Administrator can only manage the functions of the run-time system and the two delta run-time extensions.

Main Menu

Services

Services

Clock

Calendar

Mail

Electronic Mail

View

Write

Remove

- Error Handling**
 - Error Handling**
 - View**
 - Move**
 - Remove**
- "Easylife" Parameters**
 - "Easylife" Parameters**
 - Print Page Length**
 - User Language**
 - Available Languages**
 - English**
 - Italian**
 - French**
 - Window Appearance**
 - Window Appearance**
 - Partial Reverse**
 - Full Reverse**
 - No Reverse**
 - Shell Escape**
 - Display Parameters**
 - Save Parameters**
- User Menu**
 - User Menu Management**
 - Create/Modify Menu**
 - Activate Menu**
- Anchor Management**
 - Anchor Management**
 - List**
 - Remove**
 - Remove all**
 - Save Anchors**
- Messages**
- Context information**
- File Management**
 - File Management**
 - Create**
 - Modify**
 - View**
 - Copy**

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Applications

Applications

User

System Administration

System Administration

File System

File System

Incremental Backup

Back Up

Selective Copy on Floppy Disk

Dump on Magnetic Tape

Restore From Magnetic Tape

Floppy Disk

Floppy Disk

Floppy Disk Formatting

Make File System

Free Space on Hard Disk

Change Protection Mode

Files Protection

Everyone

Access Permission

Read

Write

Execute

Group Only

Access Permission

Read

Write

Execute

Owner Only

Access Permission

Read

Write

Execute

Activate Protections

Make a file system

Mount a file system

Unmount a file system

List mounted file systems

- User Configuration
 - User Configuration
 - Customize Menu
 - Customize Menu
 - All Menus
 - Interactive Configuration
 - Copy Existing User Configuration
 - Create New Easylife User
 - Create New UNIX User
 - List Users
 - Remove User
 - Create/Modify Password
- Tty Configuration
- Process Management
 - Processes
 - Processes Status
 - Kill a Process
- Printer Configuration
- Easyconf
- Shutdown
- Exit

System Administrator Menus for the Full System

The following is a list of all the menus available to the System Administrator, when the delta *easy*life menus have been added to the run-time file system.

Main Menu

Services

Services

Clock

Calendar

Mail

Electronic Mail

View

Write

Remove

Calculator

Error Handling

Error Handling

View

Move

Remove

"Easylife" Parameters

"Easylife" Parameters

Print Page Length

User Language

Available Languages

English

Italian

French

Window Appearance

Window Appearance

Partial Reverse

Full Reverse

No Reverse

Shell Escape
Choose Editor
Display Parameters
Save Parameters
User Menu
 User Menu Management
 Create/Modify Menu
 Activate Menu
Anchor Management
 Anchor Management
 List
 Remove
 Remove all
 Save Anchors
Messages
Context information

File Management

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

Split Files

From Head

From Tail

Equal Pieces

Applications

Applications

Document Handling

Document Handling

Source Handling

Formatting

User

Communication

Communication

Standard Tools

Standard Tools

File Transfer

Terminal Emulation

Packages

Communication Packages

BSC Connect

SNA Connect

LAN Connect

PC Connect

VIP Connect

H.B. Connection

HOST PAD Connection

HOST PAD Connection

HOST PAD Configuration

HOST PAD Server

UNIPLEX

UNIFY

INFORMIX SQL

INFORMIX 4GL

Software Factory
Software Factory
C

C Language

Source Program Handling

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

- Split Files**
 - From Head
 - From Tail
 - Equal Pieces
- Compile and Link**
 - Compile and Link**
 - Select Objects
 - Compiler Parameters
 - Compiler Parameters**
 - Program Name
 - Background Compilation
 - Optimizer
 - Math Library
 - Curses Library
 - Other Libraries
 - Other options
- Compile**
- Tools**
 - C tools**
 - Cross-Reference
 - C Program Beautifier
 - "Make"
 - Symbolic Debugger
 - Syntax Analyzer
- Run Programs**

C svS

C Language SVS

Source Program Handling

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

Split Files

From Head

From Tail

Equal Pieces

Compile and Link
Compile and Link
Select Objects
Compile
Run Programs

RM/COBOL-85

COBOL Language

Source Program Handling

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

Split Files

From Head

From Tail

Equal Pieces

Compile and Link

COBOL Compiler

Select Objects

Compiler Parameters

Compiling parameters

Executable program name

Background compiling

Listing redirection

Cross-reference

Libraries

Other options

Compile

Run Programs

MICRO-FOCUS COBOL
COBOL Language
Source Program Handling
File Management
Create
Modify
View
Copy
 File Copy
 Copy to Hard Disk
 Copy to Floppy Disk
Remove
Move
Print
Execute
List All Objects
Directory Management
 Directory Management
 Create
 Remove
 Copy
 Change
Concatenate Files
Link Files
Advanced Functions
 Advanced Functions
 Compare Files
 Find Pattern
 Sort
 Compact
 Expand
 Count
 Find
 Split
 Split Files
 From Head
 From Tail
 Equal Pieces

Compile and Link
 COBOL Compiler
 Select Objects
 Compiler Parameters
 Compiling parameters
 Executable program name
 Background compiling
 Listing redirection
 Cross-reference
 Libraries
 Other options
 Compile
Run Programs

SVS BASIC Interpreter

SVS FORTRAN

SVS FORTRAN Language

Source Program Handling

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

Split Files
From Head
From Tail
Equal Pieces

Compile and Link
SVS FORTRAN Compiler
Select Objects
Compile
Run Programs

SVS PASCAL

SVS PASCAL Language

Source Program Handling

File Management

Create

Modify

View

Copy

File Copy

Copy to Hard Disk

Copy to Floppy Disk

Remove

Move

Print

Execute

List All Objects

Directory Management

Directory Management

Create

Remove

Copy

Change

Concatenate Files

Link Files

Advanced Functions

Advanced Functions

Compare Files

Find Pattern

Sort

Compact

Expand

Count

Find

Split

Split Files

From Head

From Tail

Equal Pieces

Compile and Link
SVS Pascal Compiler
Select Objects
Compile
Run Programs

System Administration

System Administration

File System

File System

Incremental Backup

Back Up

Selective Copy On Floppy Disk

Dump On Magnetic Tape

Restore From Magnetic Tape

Floppy Disk

Floppy Disk

Floppy Disk Formatting

Make File System

Free Space on Hard Disk

Change Protection Mode

Files Protection

Everyone

Access Permission

Read

Write

Execute

Group Only

Access Permission

Read

Write

Execute

Owner Only

Access Permission

Read

Write

Execute

Activate Protections

Mount a file system

Unmount a file system

List mounted file systems

- User Configuration
 - User Configuration
 - Customize Menu
 - Customize Menu
 - All Menus
 - Interactive Configuration
 - Copy Existing User Configuration
 - Create New Easylife User
 - Create New UNIX User
 - List Users
 - Remove User
 - Create/Modify Password
 - Print "Easylife" Structure
- Tty Configuration
- Process Management
 - Processes
 - Processes Status
 - Kill a Process
- Printer Configuration
- Easyconf
- Shutdown
- Exit

Printer Administrator Menus

There is an entry, named *Printer Configuration*, in the System Administrator's *System Administration* menu. The relevant menus of this option cannot be accessed by the System Administrator. Only the Printer Administrator, *lp*, may create and modify printers using these functions. All the menus of *lp* are listed below.

Main Menu

Services

Services

Clock

Calendar

Mail

Electronic Mail

 View

 Write

 Remove

Calculator

Error Handling

Error Handling

 View

 Move

 Remove

"Easylife" Parameters

"Easylife" Parameters

 Print Page Length

 User Language

Available Languages

 English

 Italian

 French

Window Appearance

Window Appearance

 Partial Reverse

 Full Reverse

 No Reverse

Shell Escape
Choose Editor
Display Parameters
Save Parameters
User Menu
 User Menu Management
 Create/Modify Menu
 Activate Menu
 Anchor Management
 Anchor Management
 List
 Remove
 Remove all
 Save Anchors
 Messages
 Context information

System Administration

System Administration

Printer Configuration

LP Spooling Management

Activate Scheduler

Stop Scheduler

Printer Management

Printer Management

Create

Delete

List

Accept

Enable

Disable

Reject

Printer Class Management

Printer Class Management

Create a Class

Delete a Class

List Classes

Remove a Printer from a Class

Add a Printer to a Class

List Printers in Class

Default Destination

Spooling System Status

Scheduler Status

Redirect Print Request

Move Destination

Old Destination

New Destination

Activate

Cancel Print Request

Exit

SECTION VII

easylife ON GCOS4

On machines that support both the UNIX and GCOS4 operating systems, there is a version of *easylife* that has been enhanced to manage the extra functionality. Selecting **<UNIX/GCOS FACILITIES>** in the *Main Menu*, leads to the functions that handle the interface between the two operating systems. Apart from these extra menus, this version of *easylife* behaves in exactly the same way as the UNIX-only version.

The GCOS files accessed by UNIX are of two types: either a *GCOS Support File* subfile, or a *GCOS Database* file. In the *easylife* menus, these are respectively referred to as a *GCOS Sf subfile* and a *GCOS Db file*. The generic term, *GCOS file*, refers to both types.

UNIX/GCOS4 Interface Menus

The additional menus supplied with *easylife* are listed below. The titles of each sub-menu are printed in bold type. It must be stressed that these are titles and not options that may be selected in that sub-menu.

Main Menu

UNIX/GCOS Facilities

UNIX/GCOS Facilities

Disk Space Administration

Disk Space Administration

Create partition

Remove partition

List partition

GCOS Batch Jobs

GCOS Batch Jobs

Submit Job

Inspect Job

Inspect Report

GCOS Files Visibility

GCOS Files Visibility

Create access to a GCOS Sf subfile

Create access to a GCOS Db file

Remove access to a GCOS file

List GCOS file description

File Transfer

File Transfer

UNIX to GCOS Sf subfile

UNIX to GCOS Db file

GCOS Sf subfile to UNIX

GCOS Db file to UNIX

Device Switching

Device Switching

UNIX to GCOS Terminal Switch

Diskette Device Allocation

Diskette Device Deallocation

Tape Cartridge Device Allocation

Tape Cartridge Device Deallocation

Printer Device Allocation

Printer Device Deallocation

List Shared Device Status

USER'S REMARKS FORM

TITLE XPS-100
easy life
USER GUIDE

ORDER NO. HZ07-01
DATED APRIL 1989

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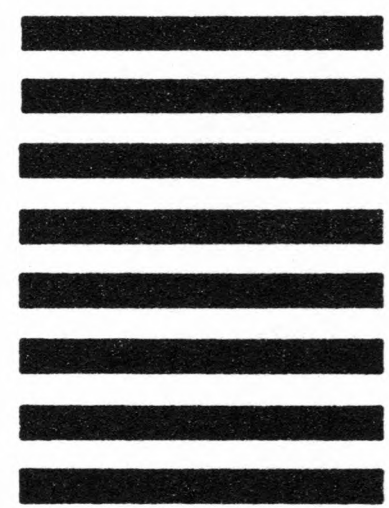
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